



#5

SEQUENCE LISTING

<110> Jeffers, Michael
Shimkets, Richard A
Sudhirdas, Prayaga K
Boldog, Ferenc L
Yang, Meija
Burgess, Catherine
Fernandes, Elma
Hermann, John L
LaRochelle, William J
Lichenstein, Henri

<120> Novel Fibroblast Growth Factor and Nucleic Acids
Encoding Same

<130> 15966-557 CIP2

<140> 09/817,814

<141> 2001-03-26

<150> 09/609,543

<151> 2000-07-03

<150> 09/494,585

<151> 2000-01-31

<150> 60/145,899

<151> 1999-07-27

<160> 25

<170> PatentIn Ver. 2.1

<210> 1

<211> 633

<212> DNA

<213> Homo sapiens

<400> 1

atggctccct tagccgaagt cgggggctt ctgggcggcc tggagggctt gggccagcag 60
gtgggttcgc atttcctgtt gcctcctgcc ggggagcggc cgccgctgct gggcgagcgc 120
aggagcgcgg cggagcggag cgcgcgcggc gggccggggg ctgcgcagct ggcgcacctg 180
cacggcatcc tgcgcgcggc gcagctctat tgcgcaccg gcttccacct gcagatcctg 240
cccgaaggca gcgtgcaggg caccgcgcag gaccacagcc tcttcggtat cttggaattc 300
atcagtgtgg cagtgggact ggtcagtatt agaggtgtgg acagtggctc ctatcttggg 360
atgaatgaca aaggagaact ctatggatca gagaaactta cttccgaatg catctttagg 420
gagcagtttg aagagaactg gtataacacc tattcatcta acatatataa acatggagac 480

09/817,814

actggccgca ggtattttgt ggcaacttaac aaagacggaa ctccaagaga tggcgccagg 540
 tccaagaggc atcagaaatt tacacatttc ttacctagac cagtggatcc agaaagagtt 600
 ccagaattgt acaaggacct actgatgtac act 633

<210> 2
 <211> 211
 <212> PRT
 <213> Homo sapiens

<400> 2
 Met Ala Pro Leu Ala Glu Val Gly Gly Phe Leu Gly Gly Leu Glu Gly
 1 5 10 15

Leu Gly Gln Gln Val Gly Ser His Phe Leu Leu Pro Pro Ala Gly Glu
 20 25 30

Arg Pro Pro Leu Leu Gly Glu Arg Arg Ser Ala Ala Glu Arg Ser Ala
 35 40 45

Arg Gly Gly Pro Gly Ala Ala Gln Leu Ala His Leu His Gly Ile Leu
 50 55 60

Arg Arg Arg Gln Leu Tyr Cys Arg Thr Gly Phe His Leu Gln Ile Leu
 65 70 75 80

Pro Asp Gly Ser Val Gln Gly Thr Arg Gln Asp His Ser Leu Phe Gly
 85 90 95

Ile Leu Glu Phe Ile Ser Val Ala Val Gly Leu Val Ser Ile Arg Gly
 100 105 110

Val Asp Ser Gly Leu Tyr Leu Gly Met Asn Asp Lys Gly Glu Leu Tyr
 115 120 125

Gly Ser Glu Lys Leu Thr Ser Glu Cys Ile Phe Arg Glu Gln Phe Glu
 130 135 140

Glu Asn Trp Tyr Asn Thr Tyr Ser Ser Asn Ile Tyr Lys His Gly Asp
 145 150 155 160

Thr Gly Arg Arg Tyr Phe Val Ala Leu Asn Lys Asp Gly Thr Pro Arg
 165 170 175

Asp Gly Ala Arg Ser Lys Arg His Gln Lys Phe Thr His Phe Leu Pro
 180 185 190

Arg Pro Val Asp Pro Glu Arg Val Pro Glu Leu Tyr Lys Asp Leu Leu

195

200

205

Met Tyr Thr
210

<210> 3

<211> 38

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:FGF-CX Forward
Primer

<400> 3

ctcgtcagat ctccaccatg gctcccttag ccgaagtc 38

<210> 4

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:FGF-CX Reverse
Primer

<400> 4

ctcgtcctcg agagtgtaca tcagtaggtc cttg 34

<210> 5

<211> 424

<212> DNA

<213> Homo sapiens

<400> 5

tggatcattt aaaggggatt ctcaggcgga ggcagctata ctgcaggact ggatttcact 60
tagaaatctt ccccaatggt actatccagg gaaccaggaa agaccacagc cgatttggca 120
ttctggaatt tatcagtata gcagtgggcc tggtcagcat tcgaggcgtg gacagtggac 180
tctacctcgg gatgaatgag aagggggagc tgtatggatc agaaaaacta acccaagagt 240
gtgtattcag agaacagttc gaagaaaact ggtataatac gtactcgtca aacctatata 300
agcacgtgga cactggaagg cgatactatg ttgcattaaa taaagatggg accccgagag 360
aagggactag gactaaacgg caccagaaat tcacacattt tttacctaga ccagtggacc 420
ccga 424

<210> 6
 <211> 288
 <212> DNA
 <213> Homo sapiens

<400> 6
 taccgaagag gctgtggtcc tgccgggtgc cctgcacgct gccgtcgggc aggatctgca 60
 ggtggaagcc ggtgcggcaa tagagctgcc ggcgcgcagg atgccgtgca ggtgcgccag 120
 ctgctgcagcc cccggccccgc cgcgcgcgct ccgctccgcc gcgctcctgc gctcgcccag 180
 cagcggcggc cgctccccgg caggaggcaa caggaaatgc gaacccaact gctggcccaa 240
 gccctccagg ccgcccagaa agcccccgac ttcggctaag ggagccat 288

<210> 7
 <211> 255
 <212> DNA
 <213> Homo sapiens

<400> 7
 agtgtacatc agtaggtcct tgtacaattc tggaactctt tctggatcca ctggtctagg 60
 taagaaatgt gttaaatttct gatgcctctt ggacctggcg ccatctcttg gagttccgtc 120
 tttgttaagt gccacaaaat acctgcggcc agtgtctcca tgtttatata tgtagatga 180
 ataggtgtta taccagttct cttcaaactg ctccctaaag atgcattcgg aagtaagttt 240
 ctctgaaaag agaga 255

<210> 8
 <211> 106
 <212> DNA
 <213> Homo sapiens

<400> 8
 ctgatccata gagttctcct ttgtcattca ttccaagata gagaccactg tccacacctc 60
 taatactgac cagtcccact gccacactga tgaattccaa gatacc 106

<210> 9
 <211> 205
 <212> PRT
 <213> Homo sapiens

<400> 9
 Met Ala Pro Leu Gly Glu Val Gly Asn Tyr Phe Gly Val Gln Asp Ala
 1 5 10 15
 Val Pro Phe Gly Asn Val Pro Val Leu Pro Val Asp Ser Pro Val Leu
 20 25 30

Leu Ser Asp His Leu Gly Gln Ser Glu Ala Gly Gly Leu Pro Arg Gly
 35 40 45
 Pro Ala Val Thr Asp Leu Asp His Leu Lys Gly Ile Leu Arg Arg Arg
 50 55 60
 Gln Leu Tyr Cys Arg Thr Gly Phe His Leu Glu Ile Phe Pro Asn Gly
 65 70 75 80
 Thr Ile Gln Gly Thr Arg Lys Asp His Ser Arg Phe Gly Ile Leu Glu
 85 90 95
 Phe Ile Ser Ile Ala Val Gly Leu Val Ser Ile Arg Gly Val Asp Ser
 100 105 110
 Gly Leu Tyr Leu Gly Met Asn Glu Lys Gly Glu Leu Tyr Gly Ser Glu
 115 120 125
 Lys Leu Thr Gln Glu Cys Val Phe Arg Glu Gln Phe Glu Glu Asn Trp
 130 135 140
 Tyr Asn Thr Tyr Ser Ser Asn Leu Tyr Lys His Val Asp Thr Gly Arg
 145 150 155 160
 Arg Tyr Tyr Val Ala Leu Asn Lys Asp Gly Thr Pro Arg Glu Gly Thr
 165 170 175
 Arg Thr Lys Arg His Gln Lys Phe Thr His Phe Leu Pro Arg Pro Val
 180 185 190
 Asp Pro Asp Lys Val Pro Glu Leu Tyr Lys Asp Ile Leu
 195 200 205

<210> 10

<211> 205

<212> PRT

<213> Mus musculus

<400> 10

Met Ala Pro Leu Gly Glu Val Gly Ser Tyr Phe Gly Val Gln Asp Ala
 1 5 10 15
 Val Pro Phe Gly Asn Val Pro Val Leu Pro Val Asp Ser Pro Val Leu
 20 25 30
 Leu Asn Asp His Leu Gly Gln Ser Glu Ala Gly Gly Leu Pro Arg Gly
 35 40 45

09617614-000701

Pro Ala Val Thr Asp Leu Asp His Leu Lys Gly Ile Leu Arg Arg Arg
50 55 60

Gln Leu Tyr Cys Arg Thr Gly Phe His Leu Glu Ile Phe Pro Asn Gly
65 70 75 80

Thr Ile Gln Gly Thr Arg Lys Asp His Ser Arg Phe Gly Ile Leu Glu
85 90 95

Phe Ile Ser Ile Ala Val Gly Leu Val Ser Ile Arg Gly Val Asp Ser
100 105 110

Gly Leu Tyr Leu Gly Met Asn Glu Lys Gly Glu Leu Tyr Gly Ser Glu
115 120 125

Lys Leu Thr Gln Glu Cys Val Phe Arg Glu Gln Phe Glu Glu Asn Trp
130 135 140

Tyr Asn Thr Tyr Ser Ser Asn Leu Tyr Lys His Val Asp Thr Gly Arg
145 150 155 160

Arg Tyr Tyr Val Ala Leu Asn Lys Asp Gly Thr Pro Arg Glu Gly Thr
165 170 175

Arg Thr Lys Arg His Gln Lys Phe Thr His Phe Leu Pro Arg Pro Val
180 185 190

Asp Pro Asp Lys Val Pro Glu Leu Tyr Lys Asp Ile Leu
195 200 205

<210> 11

<211> 205

<212> PRT

<213> Rattus norvegicus

<400> 11

Met Ala Pro Leu Gly Glu Val Gly Ser Tyr Phe Gly Val Gln Asp Ala
1 5 10 15

Val Pro Phe Gly Asn Val Pro Val Leu Pro Val Asp Ser Pro Val Leu
20 25 30

Leu Ser Asp His Leu Gly Gln Ser Glu Ala Gly Gly Leu Pro Arg Gly
35 40 45

Pro Ala Val Thr Asp Leu Asp His Leu Lys Gly Ile Leu Arg Arg Arg

0001/014-000701

50 55 60

Gln Leu Tyr Cys Arg Thr Gly Phe His Leu Glu Ile Phe Pro Asn Gly
65 70 75 80

Thr Ile Gln Gly Thr Arg Lys Asp His Ser Arg Phe Gly Ile Leu Glu
85 90 95

Phe Ile Ser Ile Ala Val Gly Leu Val Ser Ile Arg Gly Val Asp Ser
100 105 110

Gly Leu Tyr Leu Gly Met Asn Glu Lys Gly Glu Leu Tyr Gly Ser Glu
115 120 125

Lys Leu Thr Gln Glu Cys Val Phe Arg Glu Gln Phe Glu Glu Asn Trp
130 135 140

Tyr Asn Thr Tyr Ser Ser Asn Leu Tyr Lys His Val Asp Thr Gly Arg
145 150 155 160

Arg Tyr Tyr Val Ala Leu Asn Lys Asp Gly Thr Pro Arg Glu Gly Thr
165 170 175

Arg Thr Lys Arg His Gln Lys Phe Thr His Phe Leu Pro Arg Pro Val
180 185 190

Asp Pro Asp Lys Val Pro Glu Leu Tyr Lys Asp Ile Leu
195 200 205

<210> 12
<211> 208
<212> PRT
<213> Xenopus laevis

<400> 12
Met Ala Pro Leu Ala Asp Val Gly Thr Phe Leu Gly Gly Tyr Asp Ala
1 5 10 15

Leu Gly Gln Val Gly Ser His Phe Leu Leu Pro Pro Ala Lys Asp Ser
20 25 30

Pro Leu Leu Phe Asn Asp Pro Leu Ala Gln Ser Glu Arg Leu Ser Arg
35 40 45

Ser Ala Pro Ser Asp Leu Ser His Leu Gln Gly Ile Leu Arg Arg Arg
50 55 60

Gln Leu Tyr Cys Arg Thr Gly Phe His Leu Gln Ile Leu Pro Asp Gly
 65 70 75 80
 Asn Val Gln Gly Thr Arg Gln Asp His Ser Arg Phe Gly Ile Leu Glu
 85 90 95
 Phe Ile Ser Val Ala Ile Gly Leu Val Ser Ile Arg Gly Val Asp Thr
 100 105 110
 Gly Leu Tyr Leu Gly Met Asn Asp Lys Gly Glu Leu Phe Gly Ser Glu
 115 120 125
 Lys Leu Thr Ser Glu Cys Ile Phe Arg Glu Gln Phe Glu Glu Asn Trp
 130 135 140
 Tyr Asn Thr Tyr Ser Ser Asn Leu Tyr Lys His Gly Asp Ser Gly Arg
 145 150 155 160
 Arg Tyr Phe Val Ala Leu Asn Lys Asp Gly Thr Pro Arg Asp Gly Thr
 165 170 175
 Arg Ala Lys Arg His Gln Lys Phe Thr His Phe Leu Pro Arg Pro Val
 180 185 190
 Asp Pro Glu Lys Val Pro Glu Leu Tyr Lys Asp Leu Met Gly Tyr Ser
 195 200 205

<210> 13
 <211> 26
 <212> PRT
 <213> Homo sapiens

<400> 13
 Gln Asp His Ser Leu Phe Gly Ile Leu Glu Phe Ile Ser Val Ala Val
 1 5 10 15
 Gly Leu Val Ser Ile Arg Gly Val Asp Ser
 20 25

<210> 14
 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:pSec-V5-His
Forward Primer

<400> 14

ctcgtcctcg agggaagcc tatccctaac

30

<210> 15

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:pSec-V5-His
Reverse Primer

<400> 15

ctcgtcgggc ccctgatcag cgggtttaaa c

31

<210> 16

<211> 14

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Oligonucleotide
linker

<400> 16

catggtcagc ctac

14

<210> 17

<211> 14

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Oligonucleotide
linker

<400> 17

tcgagtaggc tgac

14

<210> 18
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Ag81b Forward
Primer

<400> 18
ggaccacagc ctcttcgga

20

<210> 19
<211> 25
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Ag81b Reverse
Primer

<400> 19
tgtccacacc tctaatactg accag

25

<210> 20
<211> 26
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Ag81b Probe
Primer

<400> 20
cccactgccca cactgatgaa ttccaa

26

<210> 21
<211> 21
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Ag81 Forward
Primer

<400> 21
aggcagaagc gggagataga t 21

<210> 22
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Ag81 Reverse
Primer

<400> 22
agcagcttta cctcattcac aatg 24

<210> 23
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Ag81 Probe
Primer

<400> 23
ccatctacat ccaccaccag ttgcagaa 28

<210> 24
<211> 207
<212> PRT
<213> Homo sapiens

<400> 24
Met Ala Glu Val Gly Gly Val Phe Ala Ser Leu Asp Trp Asp Leu His
1 5 10 15

Gly Phe Ser Ser Ser Leu Gly Asn Val Pro Leu Ala Asp Ser Pro Gly
20 25 30

Phe Leu Asn Glu Arg Leu Gly Gln Ile Glu Gly Lys Leu Gln Arg Gly
35 40 45

Ser Pro Thr Asp Phe Ala His Leu Lys Gly Ile Leu Arg Arg Arg Gln
50 55 60

Leu Tyr Cys Arg Thr Gly Phe His Leu Glu Ile Phe Pro Asn Gly Thr
 65 70 75 80
 Val His Gly Thr Arg His Asp His Ser Arg Phe Gly Ile Leu Glu Phe
 85 90 95
 Ile Ser Leu Ala Val Gly Leu Ile Ser Ile Arg Gly Val Asp Ser Gly
 100 105 110
 Leu Tyr Leu Gly Met Asn Glu Arg Gly Glu Leu Tyr Gly Ser Lys Lys
 115 120 125
 Leu Thr Arg Glu Cys Val Phe Arg Glu Gln Phe Glu Glu Asn Trp Tyr
 130 135 140
 Asn Thr Tyr Ala Ser Thr Leu Tyr Lys His Ser Asp Ser Glu Arg Gln
 145 150 155 160
 Tyr Tyr Val Ala Leu Asn Lys Asp Gly Ser Pro Arg Glu Gly Tyr Arg
 165 170 175
 Thr Lys Arg His Gln Lys Phe Thr His Phe Leu Pro Arg Pro Val Asp
 180 185 190
 Pro Ser Lys Leu Pro Ser Met Ser Arg Asp Leu Phe His Tyr Arg
 195 200 205

<210> 25
 <211> 814
 <212> DNA
 <213> Homo sapiens

<400> 25
 agacagtgag agcttccttg ccatttcagt gcaaagtccc tccggagcga cctcagagga 60
 gtaaccgggc cttaactttt tgcgctcggt ttgctataat ttttctctat ccacctccat 120
 cccaccccca caacactctt tactgggggg gtcttttgtg ttccggatct cccctccat 180
 ggctccctta gccgaagtcg ggggctttct gggcggcctg gagggcttgg gccagcaggt 240
 gggttcgcat ttctgttgct ctctgccgg ggagcggcgg ccgctgctgg gcgagcgcag 300
 gagcgcggcg gagcggagcg cgcgcggcgg gccgggggct gcgcagctgg cgcacctgca 360
 cggcatcctg cgcgcggcgg agctctattg ccgcaccggc ttccacctgc agatcctgcc 420
 cgacggcagc gtgcagggca cccggcagga ccacagcctc ttcggtatct tggaattcat 480
 cagtgtggca gtgggactgg tcagtattag aggtgtggac agtgggtctct atcttggaa 540
 gaatgacaaa ggagaactct atggatcaga gaaacttact tccgaatgca tctttagggga 600
 gcagtttgaa gagaactggt ataacaccta ttcatctaac atatataaac atggagacac 660
 tggcgcaggt tattttgtgg cacttaacaa agacggaact ccaagagatg gcgccagggtc 720
 caagaggcat cagaaattta cacatttctt acctagacca gtggatccag aaagagttcc 780
 agaattgtac aaggacctac tgatgtacac ttga 814

05817814-080701